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**Regents College Examination Content Guide** 

# Nursing Concepts I (Associate Level)

## General Description of the Examination

The Nursing Concepts 1 examination measures knowledge and understanding of basic concepts of nursing care and nursing actions common to all patients throughout the life cycle, regardless of their health status. Questions concern common recurring nursing problems frequently encountered by the associate degree nurse. Questions are based on the needs of patients of various age groups and the nursing care actions properly associated with them.

The examination requires students to possess the technical vocabulary and have the knowledge of anatomy and physiology, psychosocial and physical development, and microbiology generally expected of the associate degree nurse. The examination requires students to demonstrate knowledge of the theoretical framework for each content area as well as the ability to apply this knowledge to nursing practice using the nursing process. In addition, students are required to use critical thinking skills to apply principles, concepts, and theories from the natural and social sciences, the humanities, and nursing science to the practice of nursing.

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## Uses for the Examination

Regents College, the test developer, recommends granting four (4) semester hours of lower-level undergraduate credit to students who receive a score equivalent to a letter grade of C or higher on this examination. This recommendation is endorsed by the American Council on Education. Other colleges and universities also recognize this examination as a basis for granting credit or advanced standing.

Individual institutions set their own policies for the amount of credit awarded and the minimum acceptable score. Before taking the examination, you should check with the institution from which you wish to receive credit to determine whether credit will be granted and/or to find out the minimum grade required for credit.

## **Examination Length and Scoring**

The examination consists of approximately 160 four-option multiple-choice questions, some of which are unscored, experimental questions. You will have three (3) hours to complete the examination. Since you will not be able to tell which questions are experimental, you should do your best on all of them. Scores

are based on ability level as defined in the item response theory (IRT) method of exam development, rather than simply on your total number of correct answers. Your score will be reported as a letter grade.

## **Examination Administration**

The examination is administered by computer at Sylvan Technology Centers® throughout the United States and in Canada, American Samoa, Guam, Puerto Rico, Saipan (Northern Mariana Islands), and the Virgin Islands. The examination is also administered at approved international testing centers. To receive information concerning testing dates, locations, and fees, contact Regents College.

Test Administration Regents College 7 Columbia Circle Albany, New York 12203-5159 Phone: (518) 464-8500 Toll Free: 888-RCExams (888-723-9267)

Fax: (518) 464-8777

Internet: testadmn@regents.edu

TDD: (518) 464-8501

## **Computer-Delivered Testing**

If you are testing at a Sylvan Technology Center, your examination will be delivered by computer. You will enter your answers on the computer using either the keyboard or the mouse.

The system used for our computer-delivered testing is designed to be as user-friendly as possible, even for those with little or no computer experience. Instructions provided on-screen are similar to those you would receive in a paper examination booklet. In addition, before the timed portion of your examination begins, you may choose to complete a tutorial that orients you to the

computer testing environment and gives you the opportunity to try each feature before using it in questions that will be scored. You will be instructed in how to use the mouse, the keyboard, and different parts of the screen. We encourage you to take advantage of this tutorial. If you have access to the World Wide Web, you can view the screens that you will see in the tutorial, or actually download a copy of a similar tutorial to practice with, from the Regents College Web site (www.regents.edu).

## **Third-Party Services**

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granting institutions. Students wishing to demonstrate college-level learning by taking Regents College Examinations can receive their **FREE** copies of the appropriate content guides by requesting them from Regents College.

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## **Note Concerning Wording of Nursing Diagnoses**

The North American Nursing Diagnosis Association (NANDA) continually revises and updates its listing of diagnostic categories, defining characteristics, and etiological factors. For example, between 1989 and 1994, the term "potential for" was revised first to "high risk for" and then to "risk for." Questions on the examination that include nursing diagnoses are not intended to test your knowledge of current wording or phrasing. The questions are intended to test your ability to recognize nursing diagnoses that result from nursing assessments. For the purposes of the examination, all diagnoses should be considered correctly worded, even if a newer version of the diagnosis is being used by NANDA.

## **Content Outline**

The major content areas on the examination and the percent of the examination devoted to each content area are listed below.

CONTENT AREA	PERCENT OF THE EXAMINATION
I. Nursing Process	10%
II. Health, Wellness, and Illness	20%
III. Environmental Safety	15%
IV. Biological Safety	20%
V. Medication Safety	15%
VI. Psychological Safety	20%
	100%
Emphasis	
I. Theoretical Framework: Basis for Care	34%
II. Nursing Care Related to Theoretical Fram	ework 66%
	100%

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### I. Nursing Process (10%)

The nursing process is a systematic problem-solving process directed toward the provision of nursing care for patients. It provides a framework that can be utilized in all nursing situations. This clinical decision making model consists of a series of five components: assessment, analysis, planning, implementation, and evaluation. The nursing process is carried out in conjunction with the patient and other members of the health care team.

#### A. Theoretical framework: basis for care

- 1. Characteristics of the nursing process
  - Universally applied in a variety of settings (for example: acute care facility, extended care, home care)
  - b. Cyclical and dynamic (for example: throughout the process the nurse continues to collect data, evaluate patient's response, and reassess)
  - Patient-centered (for example: nursing diagnosis identifies the patient's health problem, nursing care plan is organized in terms of patient-centered goals)

d. Interpersonal and collaborative (for example: the nurse involves the patient in establishing outcomes)

#### 2. Required competencies

- Cognitive (for example: provide rationale for patient plan of care, use critical thinking, select appropriate nursing interventions)
- b. Technical (for example: skill performance, competency in use of technical equipment)
- c. Interpersonal (for example: use therapeutic communication techniques to relate to others, establish collaborative relationship with health care team members)
- d. Ethical and legal implications
  (for example: the nurse practices
  within the parameters of the Nursing
  Practice Act, functions as patient
  advocate, adheres to ANA code of
  ethics, demonstrates accountability)

#### B. Nursing care related to theoretical framework

- 1. Assessment: gather and organize data in relation to the patient's health status
  - a. Establish the database (for example: patient history, physical assessment)
  - b. Continually update the database (for example: add information, such as laboratory test results; identify new problems; evaluate status of identified problems; record assessment findings in a timely fashion; record significant changes)
  - Document in a retrievable form
     (for example: chart data pertinent to
     nursing diagnosis, chart objectively
     without making value judgment)
- 2. Analysis: in conjunction with the patient and members of the health care team, synthesize data to identify the patient's actual or potential health problems (nursing diagnosis)
  - Interpret and analyze patient data (for example: identify defining characteristics [signs and symptoms] and cluster data)
  - Identify patient strengths
     (for example: knowledge, support
     system, compliance, individual
     coping strategies)
  - c. Identify actual or potential health problems (for example: impaired skin integrity, altered cognitive ability)
  - d. Formulate a nursing diagnosis, including diagnostic category and contributing/risk factors (for example: sensory/perceptual alterations [visual] related to the effects of aging, as evidenced by decreased visual acuity; risk for injury related to impaired cognitive functioning)
  - e. Set priorities based on the patient's developmental level, based on Maslow's hierarchy of needs, based on optimal use of resources (for example: dealing with ineffective airway clearance before addressing altered growth and development)

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- f. Determine clinical problems that require collaboration with other health care professionals (for example: physician, physical therapist, respiratory therapist)
- 3. Planning: in conjunction with the patient and members of the health care team, determine the expected outcomes (patient-centered goals) and formulate specific strategies to achieve the expected outcomes
  - a. Establish expected outcomes (patient-centered goals) for care related to health promotion, health maintenance, and health restoration (for example: patient-centered, measurable behaviors, realistic, short- or long-term)
  - b. Incorporate factors influencing the patient's health status (for example: sex, age, individual preferences, physical condition, cultural and spiritual/religious considerations, socioeconomic factors, environmental factors, psychological factors)
  - c. Using established nursing standards and protocols, plan nursing measures to help the patient to achieve the expected outcomes (patient-centered goals) (for example: ANA Standards of Practice, state nursing practice acts)
  - d. Assign patient care activities to other members of the health care team as appropriate (for example: assign nursing assistant to help patient with activities of daily living [ADLs], assign LPN/LVN to perform specific interventions)
- 4. Implementation: initiate and complete nursing actions/interventions designed to move the patient toward the expected outcomes (patient-centered goals) related to health promotion, health maintenance, and health restoration
  - a. Use nursing measures appropriate to the patient's identified health problem
  - Provide information and instruction related to the patient's identified health problem
  - c. Use nursing measures to promote continuity of care (for example: referrals, community resources)

- 5. Evaluation: assess the patient's response to nursing care including progress toward the expected outcome (patient-centered goal)
  - a. Record and report the patient's response to nursing actions (for example: record patient outcomes on clinical pathways, report multidisciplinary progress notes, report changes in patient's situation to primary physician)
  - Reassess and revise the patient's plan
    of care as necessary (for example:
    determine the extent to which the
    goals/outcomes of care have been
    achieved, compare patient's response
    to nursing intervention with expected
    outcomes [patient-centered goals],
    revise the plan of care as needed)
  - c. Determine the patient's response to care provided by other members of the health care team (for example: ask questions of the nursing assistant to determine the patient's response to care)

#### II. Health, Wellness, and Illness (20%)

This area focuses on the concept of a health continuum from wellness to illness. It includes variations on the health continuum, stress and adaptation, health assessment, and health promotion and maintenance.

#### A. Theoretical framework: basis for care

- 1. Models of health and illness (general overview)
  - a. Health/wellness as a continuum (for example: health as a dynamic state)
  - High-level wellness (for example: maximizing health potential of an individual, modifying high-risk behaviors, achievement of developmental tasks)
  - Health belief model (for example: individual's perception of susceptibility to an illness, convictions and attitudes about health and illness)
  - d. Agent-host-environment model (for example: dynamic relationship of agent, host, and environment)

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- 2. Stress and adaptation
  - Concepts of stress (for example: stimulus based, response based, transaction based)
  - b. Types of stressors (for example: physiological, psychosocial)
  - c. Defining characteristics of increased stress
    - Physiological/General Adaptation Syndrome (for example: increased heart rate, increased respiratory rate, diaphoresis, patient reports nervous stomach)
    - Psychological (for example: inability to focus, decreased perception, patient reports feelings of anxiety)
    - Cognitive (for example: decreased attention span, diminished problem-solving skills, reliance on daydreaming or fantasy)
  - d. Adaptive mechanisms to deal with stress (for example: denial, displacement, rationalization, regression, projection)
- 3. Principles related to health assessment
  - a. Data
    - Sources (for example: patient, chart, health team member, family members)
    - Objective and subjective (for example: objective data such as laboratory results, vital signs, skin conditions; subjective data such as complaints of pain, anxiety)
  - b. Health history
    - 1) Purpose (for example: collect subjective data to contribute to a database used to determine the health status of the patient)
    - 2) Present illness (for example: onset of symptoms, duration; exploration of the patient's perception of the current health problem)

- Past health history (for example: allergies, immunizations, prior hospitalizations)
- 4) Family history: obtain data regarding immediate relatives' health status and presence of genetic illnesses (for example: mother and grandmother have breast cancer, father died at age 46 with myocardial infarction)
- 5) Environmental history (for example: worked in a subway for 25 years, exposure to pollutants and carcinogens)
- Review of systems (for example: respiratory, gastrointestinal, cardiac)
- c. Physical examination
  - 1) Assessment techniques (for example: inspection, auscultation, palpation, percussion)
  - 2) General survey (for example: vital signs, height and weight, general appearance, affect, skin)
  - 3) Head-to-toe examination of body systems
    - Techniques (for example: neurological assessment, respiratory assessment, peripheral/vascular assessment, abdominal assessment)
    - b) Normal findings
      (for example: bowel
      sounds present in all four
      quadrants; pupils equal,
      round, and reactive to
      light and accommodation
      [PERRLA])
- d. Functional assessment
  - Activities of daily living (ADLs) (for example: bathing, dressing, toileting, eating, walking)
  - 2) Instrumental ADLs (for example: ability to use telephone, shopping, food preparation, housekeeping, laundry; mode of transportation; responsibility for own medications; ability to handle finances)

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- e. Mental status assessment (for example: consciousness, orientation, appropriateness of responses)
- 4. Principles related to health promotion and maintenance
  - a. Primary prevention (for example: immunizations, nutritional practices, exercise)
  - b. Secondary prevention (for example: health screening, smoking cessation)
  - c. Tertiary prevention (for example: referring a patient with hypertension to a stress-reduction group, teaching a patient how to prevent complications of a disease)
- 5. Factors influencing the patient's health, wellness, and illness
  - a. Sex (for example: disease risk, differences in morbidity and mortality)
  - b. Age/Developmental level: infant through older adult (for example: increased incidence of chronic illness in older adults, infants' and children's susceptibility to infection)
  - c. Individual preferences and patterns (for example: lifestyle, past experiences, education level, substance abuse, stages of behavior change, personal perception of health)
  - d. Physical condition (for example: presence of chronic disease, disproportional height-to-weight relationship, fatigue)
  - e. Cultural and spiritual/religious considerations (for example: values, perception of health, female-male roles, language, communication patterns)
  - f. Socioeconomic factors (for example: availability of health resources, health insurance, family structure, support system, employment status, peer pressure)
  - g. Environmental factors (for example: temperature, housing conditions, occupational hazards, light and sound levels)

- h. Psychological factors (for example: level of motivation; orientation to time, place, and person; hopelessness; helplessness)
- 6. Theoretical basis for interventions related to health, wellness, and illness
  - Interventions to promote effective coping and decrease stress (for example: counseling, relaxation techniques)
  - Alternative/complementary treatments (for example: therapeutic touch, massage, acupressure, foot reflexology, meditation)
  - c. Research findings (for example:
    Healthy People 2000: National Health
    Promotion and Disease Prevention
    Objectives, Framingham heart study,
    Harvard Women's Health Study,
    Agency for Health Care Policy
    Research [AHCPR])
  - d. Ethical and legal implications (for example: access to health care, allocation of resources, clinical practice guidelines)

#### B. Nursing care related to theoretical framework

- 1. Assessment: gather and organize data in relation to the patient's health status
  - a. Obtain the patient's history related to patient's health status (for example: nutrition, elimination, activity, exercise)
  - b. Assess factors influencing the patient's health, wellness, and illness (see IIA5)
  - c. Obtain objective patient assessment data (for example: vital signs, intake and output, weight)
  - d. Review laboratory and other diagnostic data (for example: complete blood count [CBC], blood glucose, radiology reports)
- 2. Analysis: in conjunction with the patient and members of the health care team, synthesize data to identify the patient's actual or potential health problem (nursing diagnosis)

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- a. Identify nursing diagnoses
  (for example: altered health
  maintenance related to stress;
  fatigue related to excessive role
  demands; health-seeking behavior
  [breast self-examination] related to
  desire for high-level wellness;
  ineffective individual coping related
  to knowledge deficit regarding
  stress management)
- Set priorities (for example: based on the patient's developmental level, based on Maslow's hierarchy of needs, based on optimal use of resources)
- 3. Planning: in conjunction with the patient and members of the health care team, determine the expected outcomes (patient-centered goals) and formulate specific strategies to achieve the expected outcomes
  - a. Establish expected outcomes
    (patient-centered goals) related
    to health promotion, health
    maintenance, and health restoration
    (for example: patient will identify
    stressors and effective health
    maintenance behaviors, patient will
    report an increase in energy level,
    patient will correctly and regularly
    perform breast self-examination
    [BSE], patient will use adaptive
    coping methods to reduce anxiety)
  - b. Incorporate factors influencing the patient's health, wellness, and illness in planning the patient's care (for example: consider patient's developmental level, occupation, exercise routine, smoking habits, level of anxiety, support systems, stage of wellness-illness) (see IIA5)
  - c. Using established nursing standards and protocols, plan nursing measures to help the patient achieve the expected outcomes (patient-centered goals) (for example: encourage the patient to keep a log of incidents that arouse anxiety and frustration, assist the patient to set priorities and manage time effectively, demonstrate the procedure for breast self-examination [BSE] to the patient, provide information about relaxation techniques and problem-solving skills)

- d. Assign patient care activities to other members of the health care team (for example: assign the LPN/LVN to obtain the patient's height and weight)
- 4. Implementation: initiate and complete nursing actions/interventions designed to move the patient toward the expected outcomes related to health promotion, health maintenance, and health restoration
  - a. Use nursing measures to structure an environment conducive to health (for example: eliminate annoying noises and odors, control temperature)
  - Use nursing measures to maintain psychological comfort (for example: involve the patient in decision making, respect the patient's needs, encourage the patient to express feelings)
  - c. Provide information and instruction regarding health maintenance and promotion (for example: advise the patient regarding the use of health care services and Internet resources, provide information about self-examination for early detection of disease, provide a list of community screening agencies)
  - d. Use nursing measures to promote continuity of care (for example: teaching, referrals, support groups, community resources)
- Evaluation: assess the patient's response to nursing care including progress toward the expected outcome (patient-centered goals)
  - a. Record and report the patient's response to nursing actions (for example: patient correctly performs relaxation techniques, patient demonstrates ability to use the health care system, patient reports less anxiety)
  - Reassess and revise the patient's
     plan of care as necessary (for
     example: identify need for further
     instruction, provide written
     instructions to reinforce the nurse's
     explanation and demonstration,
     revise the teaching plan)

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c. Determine the patient's response to care provided by other members of the health care team (for example: patient's response to stress-reduction group conducted by nurse practitioner, patient's response to exercise program designed by the occupational therapist)

#### III. Environmental Safety (15%)

This area focuses on the principles of a safe physical environment. The environment may be the health care agency, the home, or the community. A safe environment is one in which physical hazards are reduced and accidents are prevented.

#### A. Theoretical framework: basis for care

- 1. Principles (for example: scientific principles related to the effects of physical, mechanical, thermal, chemical, and radiation hazards on the body)
- 2. Common safety hazards in the environment
  - a. Physical/mechanical (for example: wet floors, scatter rugs, toys with small parts, poor lighting, unsecured firearms, defective equipment, improper use of restraints)
  - b. Thermal (for example: fire, electrical hazards, exposure to heat and cold)
  - c. Chemical (for example: medications, poisons, carbon monoxide, radon, lead paint)
  - d. Radiation (for example: sunburn, heat lamps, X rays)
  - e. Ecological (for example: air quality, noise pollution, water pollution)
- 3. Factors influencing the patient's environmental safety
  - a. Age/developmental level: infants through older adult (for example: dangers specific to each age range, pillow in crib of newborn, toddler access to open staircase, contact sports in school-age children, danger of falls in older adults)

- b. Individual preferences and patterns (for example: lifestyle choices, occupation, previous accidents, use of medications)
- c. Physical condition (for example: level of awareness, sensory perception, mobility status, ability to communicate)
- d. Cultural and spiritual/religious considerations (for example: burning candles, burning incense, clothing choices)
- e. Socioeconomic factors (for example: crowded housing, unemployment, income level)
- f. Environmental factors (for example: proximity to nuclear plants, proximity to airports, climate, occupational hazards, ergonomics, neighborhood crime rate)
- g. Psychological factors (for example: emotional state, cognition)
- 4. Theoretical basis for interventions related to environmental safety
  - a. Environmental modifications (for example: lighting, furniture arrangement, use of adaptive equipment, storage of toxic substances)
  - b. Safety instruction (for example: use of sports equipment such as helmets for biking; need for appropriate footwear; use of infant car seat; rescue, alarm, confine, extinguish [RACE] fire procedures)
  - c. Medications/Topical agents (for example: sunscreens, lotions, treatments for poisoning)
  - d. Safety devices (for example: siderails for bath tub, toilet grab bars, motion sensors, smoke detectors, carbon monoxide detectors, restraints)
  - e. Research findings (for example: statistics regarding incidence of accidents in relation to age and developmental level, specific risk of suffocation for infants)

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f. Ethical and legal implications (for example: nurses' duty to ensure a safe environment, Omnibus Budget Reconciliation Act [OBRA] of 1987, regulations on the use of restraints)

#### B. Nursing care related to theoretical framework

- 1. Assessment: gather and organize data in relation to the patient's health status
  - a. Obtain the patient's history related to environmental safety (for example: previous falls and reports of dizziness)
  - Assess factors influencing the patient's environmental safety (see IIIA3)
  - Obtain objective patient assessment data (for example: confused mental state, sensory deficit, weakened physical state)
  - d. Review laboratory and other diagnostic data (for example: complete blood count [CBC], blood alcohol, lead levels, cognitive assessment)
- 2. Analysis: in conjunction with the patient and members of the health care team, synthesize data to identify the patient's actual or potential health problem (nursing diagnosis)
  - a. Identify nursing diagnoses
    (for example: high risk for injury related to altered mobility, risk for poisoning related to unsecured cleaning products, impaired home maintenance related to disturbed cognitive function, risk for trauma related to lack of appropriate car seats)
  - b. Set priorities (for example: based on patient's developmental level, based on Maslow's hierarchy of needs, based on optimal use of resources)

- 3. Planning: in conjunction with the patient and members of the health care team, formulate specific strategies to achieve the expected outcomes (patient-centered goals)
  - a. Establish expected outcomes
    (patient-centered goals) for care
    related to health promotion, health
    maintenance, and health restoration
    (for example: patient will verbalize
    factors that minimize potential for
    injury, patient will not sustain injury,
    patient will use safety measures when
    ambulating, patient will modify home
    environment to eliminate hazards,
    patient will use car seats when
    transporting children)
  - b. Incorporate factors influencing the patient's environmental safety in planning the patient's care (for example: establish a safe environment for a toddler, provide grab bars in the shower for an older adult, plan safety program for new mothers, reinforce motor vehicle safety for middle-aged adult) (see IIIA3)
  - c. Using established nursing standards and protocols, plan nursing measures to help the patient achieve the expected outcomes (for example: inform the patient of Poison Control Center telephone number, teach the patient about risk related to exposure to the sun, identify potential hazards in the patient's environment, encourage the patient to use a hearing aid)
  - d. Assign patient care activities to other members of the health care team (for example: assign nursing assistant to help the patient use a walker)
- 4. Implementation: initiate and complete nursing actions/interventions designed to move the patient toward the expected outcomes (patient-centered goals) related to health promotion, health maintenance, and health restoration

- Use nursing measures to structure an environment conducive to safety (for example: maintain availability of call bell, place furniture in an uncluttered arrangement, remove safety hazards)
- b. Use nursing measures appropriate to particular safety needs (for example: shield from radiation, adjust temperature maximum of home hot water heater, answer call bell promptly)
- Use adaptive and safety devices properly (for example: wheelchairs, walkers, canes, siderails, motion sensors, fire extinguishers)
- d. Provide information and instruction regarding environmental safety (for example: orient patient to the unit, explain use of mobilizing devices, provide instruction regarding proper use of restraints)
- e. Use nursing measures to promote continuity of care (for example: teaching, referrals, support groups, community resources)
- 5. Evaluation: assess the patient's response to nursing care including progress toward expected outcomes (patient-centered goals)
  - a. Record and report the patient's response to nursing actions (for example: correct use of safety devices, incidence and prevalence of falls)
  - Reassess and revise the patient's plan of care as necessary (for example: discontinue the use of restraints, revise the teaching plan for a young adult with sunburn)
  - c. Determine the patient's response to care provided by other members of the health care team (for example: patient's ability to use walker or ambulate with nursing assistant)

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#### IV. Biological Safety (20%)

This area focuses on the principles of a safe biological environment. A safe biological environment is one in which the transmission of pathogens is reduced through physical, mechanical, and chemical means and the normal defense mechanisms of the body are supported. The inflammatory process is considered a common body response to invasion by pathogens. The skin and mucous membranes are considered to be the body's first line of defense against biological hazards. Therefore, maintenance of the integument includes the care of hair, nails, and teeth.

#### A. Theoretical framework: basis for care

- 1. Principles related to biological safety
  - Medical asepsis (for example: standard precautions, transmissionbased precautions, cleaning and disinfecting)
  - Surgical asepsis (for example: establishment and maintenance of a sterile field, methods of sterilization)

#### 2. Chain of infection

- a. Agent (for example: bacteria, viruses, fungi, protozoa, rickettsiae)
- b. Reservoir (for example: contaminated food, water, insects, gastrointestinal tract, blood)
- c. Portal of exit from the reservoir (for example: mouth, nose, anus)
- d. Mode of transmission (for example: droplet, contact, vector)
- e. Portal of entry (for example: broken skin or mucous membrane, mouth, urinary meatus)
- f. Host (for example: person with impaired immune response)
- 3. Principles related to the body's ability to defend itself from infection
  - a. Normal body defenses (for example: resident flora, transient flora, intact skin and mucous membranes)
  - b. Nonspecific defenses
    - 1) Localized defining characteristics of inflammation (for example: edema, pain, erythema, increased local temperature)

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- Systemic defining characteristics of inflammation (for example: altered vital signs, fatigue, anorexia, increased white blood cells)
- 3) Stages of an inflammatory process (for example: vascular and cellular responses, exudate, reparative)
- c. Specific defenses (active and passive immunity, antibody-mediated defenses, cell-mediated defenses)
- 4. Stages in the infectious process (for example: incubation period, prodromal period, illness period, convalescent period)
- 5. Process of wound healing
  - a. Phases of wound healing (for example: inflammatory phase, proliferative phase, maturation phase)
  - b. Types of healing (for example: primary intention, secondary intention)
  - c. Types of skin lesions (for example: papules, pustules, pressure ulcers)
  - d. Types of exudate (for example: serous, purulent, suppurative, sanguineous)
  - e. Complications of wound healing (for example: hemorrhage, infection, dehiscence, fistulas)
- 6. Factors influencing the patient's biological safety
  - a. Age/developmental level: infant through older adult (for example: decreased skin turgor in older adults, friable skin in infants, lack of active immunity in infants)
  - b. Individual factors (for example: lifestyle, health habits, risk-taking behavior in adolescents, education level, smoking, hygiene practices)
  - c. Physical condition (for example: nutritional status, presence of other illness, level of consciousness, immunosuppressive therapy, presence of invasive lines)

- d. Cultural and spiritual/religious considerations (for example: beliefs about health and illness, influence of cultural or spiritual/religious practices in infection control or hygiene practices)
- e. Socioeconomic factors (for example: income level, access to health care)
- f. Environmental factors (for example: overcrowding, unsanitary conditions, pollution, reservoirs of infection, bathing facilities)
- g. Psychological factors (for example: stress, privacy)
- 7. Theoretical basis for interventions to promote biological safety
  - a. Medications (for example: antibiotics, anti-inflammatory agents, antipyretics)
  - Maintenance of medical asepsis
     (for example: by use of standard
     precautions and transmission-based
     precautions, by cleaning and
     disinfecting)
  - c. Maintenance of surgical asepsis (for example: establish and maintain sterile field)
  - d. Wound care (for example: types of dressing, drainage systems)
  - e. Application of heat and cold (for example: compresses, aquathermia pads, ice packs)
  - f. Dietary modifications (for example: increase fluid intake; increase intake of protein, vitamins, and minerals)
  - g. Ethical and legal implications (for example: privacy, laws regarding reporting of communicable diseases)

#### B. Nursing care related to theoretical framework

- 1. Assessment: gather and organize data in relation to the patient's health status
  - a. Obtain patient's history related to biological safety (for example: susceptibility to infection, response to infection process, condition of the patient's integument, exposure to pathogens, hygiene practices)

- b. Assess factors influencing the patient's biological safety (see IVA6)
- Obtain objective patient assessment data (for example: vital signs, stage of pressure ulcer, nature of drainage, condition of wounds, shape of pressure ulcer)
- d. Review laboratory and other diagnostic data (for example: white blood count [WBC] and differential, sedimentation rates, serum albumin, wound culture and sensitivity report, erythrocyte sedimentation rate)
- 2. Analysis: in conjunction with the patient and members of the health care team, synthesize data to identify the patient's actual or potential health problem (nursing diagnosis)
  - a. Identify nursing diagnoses
    (for example: risk for infection
    related to presence of surgical
    incisions, risk for infection related
    to altered immune response, altered
    tissue perfusion related to
    inflammation, risk for infection
    related to altered nutritional status,
    body image disturbance related to
    pressure ulcer, impaired skin integrity
    related to circulatory impairment)
  - Set priorities (for example: based on the patient's developmental level, based on Maslow's hierarchy of needs, based on optimal use of resources)
- Planning: in conjunction with the patient and members of the health care team, determine the expected outcomes (patientcentered goals) and formulate specific strategies to achieve the expected outcomes
  - a. Establish expected outcomes
    (patient-centered goals) for care
    related to health promotion, health
    maintenance, and health restoration
    (for example: patient?s temperature,
    pulse, and white blood cells will
    remain within normal limits; patient
    will show no signs of infection;
    patient will show signs of increased
    tissue perfusion; patient will verbalize
    a positive body image; patient will
    maintain intact skin and mucous
    membranes)

- D. Incorporate factors influencing the patient's biological safety in planning the patient's care (for example: consider the patient's hygiene practices, explore the patient's previous strategies for coping with stress, adapt teaching materials to the patient's developmental level) (see IVA6)
- c. Using established nursing standards and protocols, plan nursing measures to help the patient achieve the expected outcomes (for example: monitor the patient's vital signs q4h, teach the patient appropriate aseptic practices, apply a warm soak to the site of inflammation, wash hands before and after direct patient contact, use standard precautions)
- d. Assign patient care activities to other members of the health care team as appropriate (for example: assign nursing assistant to bathe an older adult client, assign LPN/LVN to change dressing on pressure ulcer)
- 4. Implementation: initiate and complete nursing plans designed to move the patient toward expected outcomes (patient-centered goals) related to health promotion, health maintenance, and health restoration
  - a. Maintain aseptic technique
    (for example: maintain sterile
    technique during dressing changes,
    use handwashing technique prior
    to dressing changes, use standard
    precautions in caring for patients)
  - Use nursing measures to aid in the resolution of the inflammatory process (for example: elevate extremities, apply heat or cold, encourage fluid intake, cleanse wound)
  - Use nursing measures to prevent the spread of infection (for example: isolation technique, standard protections, use of disposable equipment)
  - Administer medications (for example: antibiotics, antipyretics, use of emollients, consider modifications related to the patient's age)

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- e. Use nursing measures to provide hygienic care to patients (for example: administer bed bath, apply clean linen, wash hair, trim and clean nails, provide tissues, encourage patient participation, reduce the amount of soap used when bathing older adults)
- f. Use nursing measures to maintain skin integrity (for example: provide high- protein foods, reposition patient, use mechanical devices)
- g. Provide information and instruction regarding biological safety (for example: instruct patient regarding antibiotic therapy, instruct patient regarding mode of transmission of pathogens, emphasize preventive measures, discuss the spread of infection, refer to neighborhood health care centers)
- h. Use nursing measures to promote continuity of care (for example: teaching, referral, support groups, community resources)
- 5. Evaluation: assess the patient's response to nursing care including progress toward the expected outcome (patient-centered goals)
  - a. Record and report the patient's response to nursing actions (for example: changes in vital signs, condition of wound, level of discomfort, characteristics of drainage, condition of skin, stage of pressure ulcer)
  - b. Reassess and revise the patient's plan of care as necessary (for example: increase fluid intake based on the patient's preferences, revise the teaching plan)
  - c. Determine patient's response to care provided by other members of the health care team (for example: ask questions of nursing assistant to determine patient's response to bath, reassess the effectiveness of wound care provided by LPN/LVN)

## V. Medication Safety (15%)

This area focuses on safety in the administration of medications to patients across the life span.

#### A. Theoretical framework: basis of care

- Principles related to the safe administration of medication
  - a. Legal aspects of drug administration (for example: controlled substance laws, possession and handling of narcotics, federal or state legislation related to drug administration, institutional policies regarding drug administration, licensed personnel who can legally dispense medications)
  - b. Components of complete medication order (for example: name of patient, date of order, name of drug, dosage, route of administration, time and frequency, physician signature)
  - c. Drug names (for example: generic, brand name, trade name)
  - d. Pharmacokinetics (for example: absorption, distribution, metabolism, excretion)
  - e. Therapeutic drug action (for example: palliative, curative, supportive, prophylactic, diagnostic)
  - f. Undesired effects (for example: side effects and adverse effects, antagonistic effects, toxic effects, idiosyncratic effects, allergic response, drug tolerance)
  - g. Routes of administration (for example: oral, intramuscular, subcutaneous, intravenous, topical, installations or irrigations, nebulizers, intradermal, transdermal, metered dose inhalers)
  - h. Types of preparations (for example: syrups, pills, lotions, powders, suppositories, transdermal patches)
  - Classifications of medication (for example: antibiotics, antiinflammatory agents, antiemetics, antipyretics)

- j. Systems of measurement (for example: metric system, apothecary system, household system, determination of drug dosage for age-specific populations)
- k. Calculation of dosage (for example: IV rates, titration, ratio and proportion, dimensional analysis)
- 2. Theoretical basis for interventions to promote safe medication administration
  - a. Five "rights" of medication administration: right patient, right medication, right dose, right route, right time
  - b. Monitor drug action, drug interaction or allergy (for example: monitor peak-trough level, observe for skin rash following antibiotic administration, assess appearance of eye and surrounding tissue prior to administering ophthalmic instillation)
- 3. Factors influencing the patient's response to medications
  - a. Sex (for example: hormonal effect, distribution of body fat)
  - b. Age/developmental level: infant through older adult (for example: decreased metabolism in older adults, rapid absorption in infants, intramuscular site selection in infants)
  - c. Individual preferences and patterns (for example: preference of liquids over tablets, idiosyncratic responses to medications, control of medication schedule, use of over-the-counter medications)
  - d. Physical condition (for example: difficulty in swallowing capsules, nutritional status, allergies, obesity, immobility)
  - e. Cultural and spiritual/religious considerations (for example: prohibitions on use of certain types of drugs, imposed fasting for religious purposes, use of herbal preparations)
  - f. Socioeconomic factors (for example: insurance coverage for medications, choice of generic vs. trade name medication)

- Environmental factors (for example: adequate space and conditions for drug storage)
- h. Psychological factors
  (for example: drug dependence,
  usage, cognitive/memory
  impairments, stress, placebo effect,
  motivation to comply, knowledge
  level, patient's expectations)

#### B. Nursing care related to theoretical framework

- 1. Assessment: gather and organize data in relation to the patient's health status
  - a. Obtain the patient's history relative to medications (for example: allergies, understanding of prescribed medications)
  - b. Assess factors influencing medication administration (Sec. VA3)
  - Obtain objective patient assessment data (for example: evidence of therapeutic or adverse effects, vital signs)
  - Review laboratory and other diagnostic data (for example, electrolytes, blood levels of drug, serum albumin, blood urea nitrogen [BUN], creatinine)
  - e. Review sources of medication information (for example: American Hospital Formulary Service (AHFS) Drug Information, Physicians' Desk Reference, pharmacology texts, drug reference books for nurses)
- Analysis: in conjunction with the patient and members of the health care team, synthesize data to identify the patient's actual or potential health problem (nursing diagnosis)
  - Identify nursing diagnoses
     (for example: health seeking
     behaviors: new medications related
     to lack of knowledge; noncompliance
     related to inability to obtain
     medication)
  - Set priorities (for example: based on the patient's developmental level, based on Maslow's hierarchy of needs, based on optimal use of resources)

- Planning: in conjunction with the patient and members of the health care team, determine expected outcomes (patientcentered goals) and formulate specific strategies to achieve the expected outcomes
  - a. Establish expected outcomes
    (patient-centered goals) for care
    related to health promotion, health
    maintenance and health restoration
    (for example: patient will verbalize
    understanding of desired effect of
    medication, patient will follow an
    established schedule for drug
    administration)
  - b. Incorporate factors influencing medication safety in planning patient care (for example: establish a safe environment for storage of medications, provide adequate instruction for drug administration, select proper equipment for medication administration, integrate of patient's preferences) (see VA3)
  - Using established nursing standards and protocols, plan nursing measures to help the patient achieve the expected outcomes (patient-centered goals) (for example: time of administration)
  - d. Assign patient care activities to other members of the health care team as appropriate (for example: instruct LPN/LVN to report evidence of adverse drug effects, instruct nursing assistant to delay assisting the patient to ambulate until therapeutic effects of analgesic are evident)
- 4. Implementation: initiate and complete nursing care plans designed to move the patient toward the expected outcomes (patient-centered goals) related to health promotion, health maintenance, and health restoration
  - a. Use nursing measures to enhance drug absorption (for example: selection of correct site for administration, selection of methods to enhance absorption, nursing responsibility in medication administration, administering medications with or without food as indicated)

- Use nursing measures to create

   an environment conducive to safe
   medication administration (for
   example: use five "rights" in drug
   administration, use medication
   administration devices properly,
   correctly calculate medication dosage)
- Use nursing measures to promote continuity of care (for example: teaching, referrals, support groups, community resources)
- d. Record drug administered on the medication administration record
- 5. Evaluation: assess the patient's response to nursing care including progress toward the expected outcome (patient-centered goals)
  - Record and report the patient's
     response to the administration of
     medications, to patient teaching
     (for example: evidence of therapeutic
     effect of medication, evidence of rash
     following the administration of a new
     antibiotics)
  - b. Reassess and revise the patient's plan of care as necessary (for example: effectiveness of medication administration, adherence to medication schedule, appropriateness of the route of administration; alter the time of the day of drug administration to accommodate work responsibilities)
  - c. Determine patient's response to care provided by other members of the health care team (for example: ask the night nurse if sedative was effective, ask the LPN/LVN if the inclusion of a stool softener in care plan has minimized constipation)

#### VI. Psychological Safety (20%)

This area focuses on a safe psychological environment. A safe psychological environment is one in which the patient understands what to expect from others. The nurse and patient exchange information and feelings by communication, therapeutic relationship, and the teaching/learning process.

#### A. Theoretical framework: basis for care

- 1. Communication
  - a. Definition and goals (for example: use of interpersonal communication skills, observations of behavior; means to convey information)
  - b. Types of communication
    - 1) Verbal (for example: written and spoken)
    - 2) Nonverbal (for example: body language, silence, touch)
  - c. Characteristics of effective communication (for example: simplicity, clarity, brevity, appropriate vocabulary, timing, relevance, pace and intonation)
  - d. Elements of the communication process
    - 1) Stimulus or referent (motivation for communication)
    - 2) Sender or encoder (initiator of message)
    - 3) Message (information that is sent)
    - 4) Channel (auditory, visual, or tactile vehicle of communication)
    - 5) Receiver or decoder (person to whom message is sent)
    - Feedback (evidence that the message has been received)
- 2. Therapeutic communication

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a. Definition and goals (for example: planned nurse-patient interaction directed toward achievement of patient-centered outcomes/goals)

- b. Techniques that facilitate communication (for example: attending, paraphrasing, reflecting, using open-ended statements, listening, employing touch)
- Blocks or barriers to effective communication (for example: use of judgmental responses, offering false reassurance, stereotyped responses, probing, advising)
- 3. The therapeutic nurse-patient (helping) relationship: dynamic process in which the nurse and patient collaborate to promote the patient's health and solve problems
  - a. Characteristics of the relationship (for example: empathy, trust and security, respect, autonomy, acceptance, genuineness)
  - b. Phases of the relationship and associated activities
    - Introductory (for example: structuring and formulating the contract, testing, building trust)
    - Working (for example: exploring and understanding thoughts and feelings, confrontation, selfdisclosure)
    - Termination (closure)
       (for example: evaluation of goal achievement, separation)
  - c. Roles in the relationship
    - Roles of the nurse (for example: leader, person, caregiver, patient advocate, counselor, teacher)
    - 3) Roles of the patient (for example: person, health care consumer, active participant)
- 4. Principles of teaching and learning
  - a. Definitions
    - 1) Teaching (for example: interactive process, assisting the person to gain new knowledge and skill)
    - Learning: the acquisition of new knowledge or skills

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- a) Cognitive: intellectual behaviors (for example: acquiring knowledge, understanding ways to control stress, understanding effects of medications)
- b) Psychomotor: skill performance (for example: performs a finger stick to test blood glucose, administers an injection)
- c) Affective: attitudes and feelings (for example: demonstrates change in attitude regarding chronic illness, motivation to comply with prescribed regimen)
- b. Basic learning principles
  - Motivation: the impulse or desire that causes a person to take an action (for example: patient identifies need to learn factors involved in weight control)
  - 2) Readiness and ability to learn: the physical, emotional, and cognitive capacity (for example: sensory acuity, presence of language skills, developmental status, physical discomfort, anxiety levels)
  - 3) Learning environment: setting that assists the patient to focus on the learning task (for example: setting is private, setting has adequate lighting; setting is appropriate to the size of the group)
- c. Basic teaching principles
  - Set priorities: based on nursing diagnoses and patient's learning needs (for example: patient may need to learn about how to administer medication before learning about the actions and side effects)

- Timing (for example: length of session, interval between learning and use, individual preference for morning or afternoon session)
- Organize teaching (for example: simple to complex, logical sequence, significant content)
- 4) Involve patient in planning and implementing teaching plan (for example: mutual setting of goals)
- 5) Build on existing knowledge (for example: individualize teaching plan to avoid redundancy)
- Select teaching method (for example: role playing, demonstration, discussion, discovery)
- 5. Factors influencing communication and ability to learn
  - a. Sex (for example: differences in communication style and responsiveness to touch)
  - b. Age/developmental level: infant through older adult (for example: use of pictures or toys with the young child)
  - c. Individual preferences and patterns (for example: territoriality, personal experiences and needs, perceptions, learning styles, educational level)
  - d. Physical condition (for example: pain, level of consciousness, sensory deficits)
  - e. Socioeconomic factors (for example: access to technology)
  - f. Cultural and spiritual/religious considerations (for example: language barriers, personal space, values related to touching and expression of feelings, roles and relationships)
  - g. Environmental factors (for example: noise level, physical space, furniture arrangement, distance from health care resource)
  - Psychological factors (for example: stress, anxiety level, self-awareness, readiness to learn, presence of support system)

- 6. Theoretical basis for intervention related to psychological safety
  - a. Physiological considerations (for example: degree of illness, sensory deficits, stress, comfort, other factors that interfere with communication and learning)
  - b. Environmental and legal implications (for example: A Patient's Bill of Rights, maintaining confidentiality)

#### B. Nursing care related to theoretical framework

- 1. Assessment: gather and organize data in relation to the patient's health status
  - a. Obtain the patient's history related to communication patterns and learning needs (for example: patient reports feeling intimidated communicating with authority figures, patient reports learning best by demonstration)
  - b. Assess factors influencing the patient's communication (see VIA5)
  - c. Obtain patient assessment data (for example: language development, communication skills, learning style)
- 2. Analysis: in conjunction with the patient and members of the health care team, synthesize data to identify the patient's actual or potential health problem (nursing diagnosis)
  - a. Identify nursing diagnoses
    (for example: impaired verbal
    communication related to language
    barrier, impaired social interaction
    related to cultural differences, altered
    health maintenance related to
    insufficient knowledge of the effects
    of alcohol and drug interactions)
  - Set priorities (for example: based on the patient's developmental level, based on Maslow's hierarchy of needs, based on optimal use of resources)
- 3. Planning: in conjunction with the patient and members of the health care team, determine the expected outcomes (patient-centered goals) and formulate specific strategies to achieve the expected outcomes

- a. Establish expected outcomes
  (patient-centered goals) for care
  related to health promotion, health
  maintenance, and health restoration
  (for example: patient will express
  basic needs clearly, patient will
  participate in one group activity daily,
  patient will verbalize two symptoms
  of drug interaction)
- b. Incorporate factors influencing the patient's communication in planning the patient's care (for example: locate a private room for a patient interview, plan to use closed-ended questions with a patient who has impaired verbal communication, ensure that the patient's hearing aid is functioning, use active listening with an adolescent patient, establish age-appropriate communication techniques to facilitate understanding in children and in older adults) (see VIA5)
- c. Using established nursing standards and protocols, plan nursing measures to help the patient achieve the expected outcomes (patient-centered goals) (for example: teach the patient simple phrases to communicate needs, establish age-appropriate methods of communication for expressing needs, encourage the patient to express feelings)
- d. Assign patient care activities to other members of the health care team as appropriate (for example: instruct the LPN/LVN to observe patient while changing dressing, instruct nursing assistant to maintain limit setting with patient who is abusive)
- 4. Implementation: initiate and complete nursing actions/interventions/plans designed to move the patient toward the expected outcomes (patient-centered goals) related to health promotion, health maintenance, and health restoration
  - a. Use effective communication techniques (for example: listen attentively to a patient who is anxious, inject humor into a stressful situation)

- Use therapeutic communication techniques to establish an effective nurse-patient relationship (for example: restatement, reflection, open-ended statements, paraphrasing, focusing)
- c. Promote a therapeutic nurse-patient relationship (for example: introduce self to patient, establish trust, be empathetic, maintain consistency)
- d. Structure the environment to promote communication and learning (for example: arrange furniture, provide privacy, reduce noise level)
- e. Provide alternate methods of communication (for example: language boards, play, interpreters, magic slates, computers for patients with special needs)
- f. Use a variety of teaching strategies (for example: audio-visual materials, role playing, demonstration)
- g. Use nursing measures to promote continuity of care (for example: referrals, support groups, community resources)
- 5. Evaluation: assess the patient's response to nursing care including progress toward expected outcomes (patient-centered goals)
  - a. Record and report the patient's
     response to nursing actions (for
     example: increased verbalization,
     ability to recognize symptoms, refuses
     to use a hearing aid, participates in
     group activities, expresses feelings
     about illness)
  - b. Determine patient's response to care provided by other members of the health care team (for example: ask for patient feedback on the teaching session provided by the nurse)
  - c. Reassess and revise the patient's plan of care as necessary (for example: encourage the patient and family to teach staff some words and phrases in the patient's native language, revise the teaching plan)

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## **Sample Questions**

The questions that follow illustrate those typically found on this examination. These sample questions are included to familiarize you with the type of questions you will find on the examination. The answers can be found on the inside back cover of this guide.

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- 1. Which nursing action would the nurse perform in the evaluation phase of the nursing process?
  - Demonstrate correct procedures for wound care.
  - 2) Explain the preparation required prior to a diagnostic test.
  - 3) Ask the patient to describe pain intensity following administration of an analgesic.
  - 4) Discuss expected outcomes with the patient.
- 2. Identification of expected outcomes is made during which step of the nursing process?
  - 1) analysis
  - 2) assessment
  - 3) evaluation
  - 4) planning
- 3. The nursing assistant reports that a patient has a temperature of 38.0 °C (100.5° F). Which action should the nurse carry out first?
  - 1) Assess the patient for symptoms related to temperature.
  - 2) Administer medication to lower the patient's temperature.
  - 3) Write a nursing diagnosis based on the temperature.
  - 4) Set a goal to lower that patient's temperature.
- 4. To which nursing diagnosis should the nurse give priority?
  - ineffective breathing pattern related to upper abdominal pain
  - 2) fatigue related to immobility
  - 3) altered nutrition: less than body requirements related to nausea
  - 4) fluid volume deficit related to fever

- 5. Which is the best example of an accurately written patient goal (expected outcome)?
  - 1) The patient will receive a bed bath this morning.
  - 2) Risk for injury related to weakness.
  - 3) Patient will look at the incision before discharge.
  - 4) Get the patient out of bed three times a day.
- 6. The nurse is about to perform a physical examination on a patient with dyspnea. Which position would be most comfortable for this patient to assume?
  - 1) right sidelying
  - 2) supine, with the head on a pillow
  - 3) sitting up, leaning forward on the arms
  - 4) bed elevated to 35°, with the knees flexed
- 7. The nurse is assessing a patient on bed rest. Why should the nurse inquire about the patient's usual stress-management techniques?
  - 1) to provide the patient with a stress-free environment
  - 2) to understand how the patient is likely to deal with stress in the hospital
  - 3) to help the patient develop new coping mechanisms
  - 4) to determine whether the patient should have a private room
- 8. The nurse is teaching a patient in preparation for discharge. Which patient response indicates the need for further instruction?
  - 1) "I can usually figure things out easily."
  - 2) "I understand right now. Who can I call if I have questions later?"
  - 3) "You have explained this very thoroughly.
    I have no questions."
  - 4) "Now I feel comfortable doing this myself."

- 9. The use of restraints for the prevention of falls should be limited to which situation?
  - 1) Other measures have not been effective.
  - 2) Frequent observation of the patient is not possible.
  - 3) The patient is chronically confused.
  - 4) The family has requested application of the restraints.
- 10. Which measure should be included in the plan of care to promote a patient's wound healing?
  - 1) Provide a diet high in protein and vitamin C.
  - 2) Encourage a daily exercise routine.
  - 3) Use clean technique during dressing changes.
  - 4) Maintain the patient on bed rest.
- 11. Which sign is usually seen in a dark-skinned patient with dehydration?
  - 1) slowed pulse rate
  - 2) slowed respirations
  - 3) red buccal mucosa
  - 4) decreased skin elasticity
- 12. Which action should parents take when a child ingests a poisonous substance?
  - 1) Administer syrup of ipecac.
  - 2) Dilute the poison with milk.
  - 3) Induce vomiting with a spoon.
  - 4) Call the poison control center.
- 13. Which patient behavior should alert the nurse to the need for instruction related to safety hazards in the home?

The patient

- 1) covers a tile floor with scatter rugs.
- 2) has a step stool in the kitchen.
- 3) Stores cleaning solutions in the basement.
- 4) Uses a gas stove to cook meals.

- 14. Which patient is most susceptible to infection?
  - a 16 year old who has been in an accident
  - 2) a 32 year old who is recovering from surgery
  - 3) a 50 year old who has hypertension
  - 4) a 76 year old who has respiratory problems
- 15. A patient has just been admitted with a laceration of the knee. Which finding should the nurse expect to observe during the next 24 hours?
  - 1) swelling at the site
  - 2) purulent drainage from the site
  - 3) severe pain at the site
  - 4) full movement of the knee joint
- 16. Which sign indicates adequate wound healing?
  - 1) Amount of drainage increases.
  - 2) Wound edges are not approximated.
  - 3) WBC remains elevated.
  - 4) Edema at the wound edges subsides.
- 17. Which sensory deficit in an older adult should alert the nurse to the need for instruction regarding self-administration of medications?
  - 1) hearing
  - 2) taste
  - 3) touch
  - 4) vision

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- 18. What is the purpose of using the Z-track method for specific intramuscular medications?
  - 1) to minimize tissue irritation
  - 2) to reduce pain at the injection site
  - 3) to facilitate the action of the drug
  - 4) to control the rate of absorption

- 19. The physician orders digoxin (Lanoxin) 0.25 mg PO. The pharmacy has 0.125 mg tablets available. How many tablets should the nurse administer?
  - 1) 1.0
  - 2) 2.0
  - 3) 1.5
  - 4) 0.5
- 20. A patient has just been told that a diagnostic test confirms cancer. Which response by the nurse would be most therapeutic?
  - 1) "I'm sure everything will turn out all right."
  - 2) "Perhaps you would like to talk about it."
  - 3) "You have the right to a second opinion."
  - 4) "This form of cancer is easily treated."
- 21. During a patient assessment, the nurse observes that the patient tries to articulate words but the patient's speech is not intelligible. The patient responds appropriately to questions by nodding to indicate "yes" or "no." The patient appears to be very frustrated. Which nursing diagnosis is most appropriate for this patient?
  - 1) altered health maintenance
  - 2) altered thought processes
  - 3) impaired verbal communication
  - 4) ineffective individual coping

- 22. A 63-year-old patient is being prepared for abdominal surgery. The patient tells the nurse, "I know my family will miss me when I'm gone." Which response by the nurse would be most therapeutic?
  - 1) "Your surgery has a favorable prognosis."
  - 2) "I'm going to give you something to help you to relax."
  - 3) "Your family will miss you when you're gone?"
  - 4) "You'll only be gone from your family for an hour."
- 23. During an assessment, the nurse wishes to explore a patient's feelings about his family. Which approach would be most therapeutic?
  - 1) "Do you have a favorite family member?"
  - 2) "Please tell me about your family."
  - 3) "What is your worst memory about growing up in your family?"
  - 4) "Do you have a family?"

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## **Study Materials**

The study materials listed on the following pages are recommended by the examination development committee as the most appropriate resources to help you study for the examination. Those listed as Recommended Resources are essential to your understanding of the content. The Additional Resources may provide clarification for some of the topics on the content outline, or provide enrichment in areas of interest.

This examination is one of seven (7) written examinations required of students in the Regents College associate degree programs in nursing:

Nursing Concepts 1

Nursing Concepts 2 Nursing Concepts 3 Differences in Nursing Care: Area A (modified) Differences in Nursing Care: Area B Differences in Nursing Care: Area C Occupational Strategies in Nursing

**Important:** The examinations in Commonalities in Nursing Care: Areas A and B will be withdrawn after September 30, 2000, and the examination in Differences in Nursing Care: Area A will exist in a modified form only through September 30, 2001, after which it will be replaced with Nursing Concepts 4. Students in the Regents College AAS(n) and AS(n) degree programs who have not completed Commonalities A and B and Differences A by September 30, 2000 will be required to complete Nursing Concepts 1, 2, and 3 and the modified Differences A—and enroll by February 1, 2001—to use any old-series examinations toward completion of their degree. The current examination in Differences B will be replaced in October 2001 by Nursing Concepts 5, and the examinations in Differences C and Occupational Strategies will be replaced in October 2002 by Nursing Concepts 6 and 7.

If you are planning to take several of the associate degree nursing examinations, you will need to begin building a library of nursing textbooks. For this examination, you should obtain one textbook from each of the following nursing practice areas: fundamentals, pediatrics, nursing process (diagnosis), and pharmacology. The nursing faculty recommend that you also obtain a good medical dictionary. In addition, textbooks in anatomy and physiology and microbiology will supplement your study. You may want to arrange to have access to textbooks in these areas.

The Regents College Bookstore stocks the current editions of the recommended textbooks for all examinations. In some cases, current editions will be more recent than those listed in this guide. The Bookstore also offers resources in areas such as study strategies, personal planning, and stress reduction. See the separate flyer for further information about purchasing textbooks or other resources through the Bookstore.

You may also find textbooks in college libraries, schools of nursing, medical schools, and hospitals. Public libraries may have some of the textbooks or may be able to obtain them through an interlibrary loan program.

You should allow sufficient time to obtain resources and to study before taking the examination.

#### **Electronic Peer Network**

Enrolled Regents College students are eligible to join the Regents College Electronic Peer Network (EPN). The EPN is a Web-based environment that enables Regents College students to interact academically and socially. As an EPN member, you will be able to locate a study partner, join an online study group for your exam, chat in real-time with other students, and access other resources that may be helpful to students preparing for Regents College Examinations. Enrolled students can join the EPN by visiting the Regents College home page and clicking on Electronic Peer Network.

#### Online Study Services

Regents College online study services provide enrolled and prospective students with access to subject matter experts. These services are available on a fee-forservice basis and currently assist students with writing and statistics. Please email requests for more information about these services to the appropriate address: rcwrite@regents.edu or rcstats@regents.edu or call Learning Services at 888-647-2388 (press 1-4-4 at the greeting). You may email suggestions for new online study services to rclearn@regents.edu.

#### Virtual Library

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The Regents College Virtual Library (RCVL) is an online library designed for distance learners. The RCVL (http://www.library.regents.edu) provides access to a variety of resources such as journal articles, books, Web sites, databases, and reference services. These resources can help you prepare for Regents College Examinations. While some library services are restricted to enrolled students, many are not. To access the RCVL, visit the Regents College home page.

## **Recommended Resources**

#### **Textbooks**

The examination development committee strongly recommends that you obtain one textbook in each of the four areas listed below for use in preparing for the examination. Accompanying each entry is a brief description of the materials. Each of the textbooks provides in-depth exploration of the material in the content areas to be tested. In addition, most of them have a companion study guide. If you would like assistance in organizing your study and reviewing the material in the textbooks, the committee recommends that you consider purchasing the study guides as well.

#### **Fundamentals**

Kozier, B., Erb, G., Berman, A., & Burke, K. (2000). Fundamentals of nursing: Concepts, process, and practice (6th ed.). Upper Saddle River, NJ: Prentice Hall.

This textbook addresses a wide variety of contemporary fundamental nursing principles under major section headings, such as health beliefs and practices, nursing process, lifespan development, assessing health, integral components of client care and promoting both physiologic and psychological health. Special features of this textbook include a focus on critical thinking, sample nursing care plans, clinical guidelines, and critical pathways.

#### **Study Guide:**

Van Leuven, K. (2000). *Study guide for Fundamentals of Nursing: Concepts, process, and practice.* (6th ed.). Upper Saddle River, NJ: Prentice Hall.

#### **Nursing Process (Diagnosis)**

Wilkinson, J.M. (1996). *Nursing Process: A Critical Thinking Approach*. (2nd ed.). Menlo Park, CA: Addison-Wesley.

This textbook integrates each step of the nursing process, considering concepts such as professional standards of care, nursing frameworks, ethical issues and wellness. Each chapter contains objectives as well as key terms. Critical thinking exercises assist in the development of this skill. The application activities contain an answer key with a rationale provided for the wrong answers.

#### **Pediatrics**

Wong, D. (1997). Whaley and Wong's Essentials of pediatric nursing (5th ed.). St. Louis: Mosby. Please note: The 6th edition of this text will be available in October, 2000.

This textbook presents learning objectives for each chapter and contains many color photographs. Guidelines and emergency treatments are presented in boxes within each chapter. Hundreds of tables, boxes, and diagrams are used to highlight key concepts. Key points are summarized at the end of each chapter.

#### Study Guide:

Murphy, A. (1997). *Study guide to accompany Whaley and Wong's Essentials of pediatric nursing*(5th ed.). St. Louis: Mosby.

#### Pharmacology

Eisenhauer, L.A., Nichols, L.W., Spencer, R.T., & Bergan, F.W. (1999) *Clinical pharmacology and nursing management* (5th ed.). Philadelphia, PA: Lippincott.

This textbook incorporates essential pharmacological concepts, critical thinking activities, and clinical judgment skills so that drug therapy is as safe and appropriate as possible for patients and for nurses. Each chapter is organized beginning with an outline and review of physiology and pathophysiology as it relates to the drug class discussed. Key pharmacological content and nursing management links present the connection between drug theory and each step of the nursing process.

#### Student Workbook:

Eisenhauer et al. (1999). *Clinical pharmacology and nursing management.* (5th ed). Philadelphia: PA, Lippincott.

## **Additional Resources**

The following resources are suggested to supplement your understanding of the material presented in the recommended resources. These resources include textbooks, journal articles, and audiovisual materials. They were selected because they are current and relevant to the content to be tested by this examination. You are encouraged to read widely; you may find other textbooks, articles, or audiovisual resources to be of interest. These additional resources are an important supplementary learning activity because they address

issues that are of interest to practicing nurses and provide "real world" examples of how the theory in textbooks can be applied to actual clinical situations.

You should be able to find many of these resources at a nearby school of nursing library, college library, or hospital library. You might also find them at your state nurses' association library. In addition, your local public librarian may be able to assist you with an interlibrary loan request. It is not necessary to purchase these resources.

#### **Textbooks**

The textbook below may provide further clarification in the areas of clinical nursing skill procedures and cultural assessment of patients and families. You should also use a math-for-medications textbook for reference.

Van Leuven, K. (2000). *Clinical Companion for Fundamentals of nursing: Concepts, process, and practice* (6th ed.). Upper Saddle River, NJ: Prentice Hall.

#### Journal Articles

Because journal articles tend to be written in a simple, straightforward manner, you may find them useful in explaining or expanding upon difficult concepts. Many articles include case studies or post-tests to help you assess your learning. You may also find them helpful in providing an "inside view" into areas of nursing practice with which you are not familiar. You may want

to review nursing journals from this year to locate more current articles.

As a professional nurse, you have a responsibility to continue your education. One way you can keep current is by reading journal articles. Subscribing to one or two journals is a helpful way to gain exposure to current articles in the field.

#### I. Nursing Process

Nicoteri, J.A. (1998). Critical thinking skills. *American Journal of Nursing, 98*(10) 62–65.

Oermann, M.H. (1999). Patient outcomes: A measure of nursing's value. *American Journal of Nursing*, 99(9), 40–47.

#### II. Health, Wellness, and Illness

Assessing the older patient (1998). RN, March, 46.

Falter, E.J. (1999). The health care continuum:How to make the business of nursing work for you.

American Journal of *Nursing*, *99*(1), 63–64.

Keegan, L. (1999). Alternative and complementary therapies, an overview for nursing students. *NSNA/Imprint, February/March,* 36–38.

Leighton, C. (1998). A change of heart. American Journal of Nursing, 98(10), 33–37.

Understanding the mind/body link (1998). *RN, January,* 28.

#### III. Environmental Safety

Nine steps to effective restraint use (1998). *RN*, December, 23.

Rogers, P.D. (1999). Restraint free care, is it possible? *American Journal of Nursing*, 99(10), 26–33.

#### IV. Biological Safety

Thompson, J. (2000). A practical guide to wound care. *RN*, 63(1), 48–54.

When wounds won't heal (1998). RN, January, 20.

#### V. Medication Safety

Confidentially: IV error: Watch your drip. (1999). *Nursing*, *29*(7), 32.

Karch, A.M. (2000). Practice Errors. "Cutting it close." *American Journal of Nursing, 100*(1), 23.

Karch, A.M. (1999). Med Errors. "Like taking a vitamin." *American Journal of Nursing*, 99(11), 12.

#### VI. Psychological Safety

Hansen, M. (1998). Patient-centered teaching from theory to practice. *American Journal of Nursing*, 98(1), 56–60.

How to deal with an angry patient (1998). *RN, October,* 63.

Hubert, P. (1998). Revealing patient concerns. *American Journal of Nursing*, 98(10), 16H–16L.

Keller, V., & Baker, L. (2000). Communicate with CARE. *RN*, 63(1), 32–33.

Nield-Anderson, L. et al. (1999). Responding to "difficult" patients. *American Journal of Nursing*, 99(12), 26–35. CE credit available.

Patient education: We have a better system now (1997). *RN, June,* 19.

Zook, R. (1998). Learning to use positive defense mechanisms. *American Journal of Nursing, 98*(3), 16B–16H.

#### **Audiovisual Resources**

A very good source of videocassettes is the American Journal of Nursing Company's Multimedia Catalog. To order, call 800-CALL-AJN. Other sources for computer and video programs are Concept Media, Irvine, CA (call 800-233-7078 or visit their Web site at www.Conceptmedia.com) and Insight Media, New York City (call 800-233-9910).

- 1. CD-ROM: Transcultural Perspectives in Nursing (Improving nurse-client effectiveness, Communication, Parts 1 and 2). Concept Media.
- 2. Video: *Pediatric Medication Administration* (*Principles, calculations, oral and parenteral meds*). Concept Media.
- 3. Whaley and Wong's Pediatric Nursing Video Series including *Communication with Children* and Families, Medications and Injections. Mosby.
- 4. Video: *Administering Medications by Nonparenteral Routes (oral, topical, instillations, inhalants, irrigations)* Insight Media.
- 5. Video: *Communicating with Clients from Different Cultures.* Insight Media.
- 6. Video: Communication in Nursing Across the Lifespan-Children, Families, and the Elderly. Insight Media.
- 7. Video: Patient Teaching. Insight Media.

#### Web sites for general information in nursing concepts:

http://www.nursingcenter.com

http://www.rnweb.com

http://s-witch.com: This site has a CD ROM course available on interpersonal communication and basic counseling.

## Content/Reference Chart

Listed below are the chapters in the recommended resources that cover the material in each content area. The list may help you begin to locate the topics in the content outline. The list is not intended to be comprehensive. To cover all of the material in this content guide, you will need to refer to other chapters in the reference textbooks. Chapter numbers and titles may differ in subsequent editions.

#### I. Nursing Process

Kozier et al. (6th edition, 2000)

Ch. 16 – Critical Thinking and the Nursing Process

Ch. 17 – Assessing

Ch. 18 – Diagnosing (Analysis)

Ch. 19 - Planning

Ch. 20 – Implementing and Evaluating

Ch. 21 – Documenting and Reporting (see sections on ethical and legal considerations, documenting nursing activities, guidelines for recording and reporting, only)

Wong (5th edition, 1997)

Ch. 2 – Nursing Process in Care of the Child and Family

Wilkinson (2nd edition, 1996)

Ch. 1 – Overview of the Nursing Process (see sections on defining nursing process, benefits of nursing process. and ethical considerations, only)

Ch. 3 – Assessment

Ch. 4 – Diagnostic Reasoning

Ch. 5 – Writing Diagnostic Statements

Ch. 6 – Planning

Ch. 7 – Implementation Ch. 8 – Evaluation

PLEASE NOTE: Although this content area, Nursing Process, occupies 10% of Nursing Concepts 1, the material it contains is a vital part of professional nursing and the foundation for all test questions found in the associate level exam series. The nursing process must be applied, not just memorized. In clinical practice, you will be applying the nursing process, not simply recalling facts. It will be much more helpful if you start to practice that now and focus primarily on Section B, Nursing Care Related to Theoretical Framework, found in each content guide, as you study.

#### II. Health, Wellness, and Illness

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Kozier et al. (6th edition, 2000)

Ch. 11 - Health, Wellness, and Illness

Ch. 15 - Holistic Healing Modalities (see section on Alternative Medical Therapies, only)

Ch. 28 – Vital Signs

Ch. 29 – Health Assessment (see section on Physical Assessment and General Survey only)

Ch. 39 - Stress and Coping

Wong (5th edition, 1997)

Ch. 5 – Developmental Influences on Child Health Promotion (see section on growth and development, stop before section on physiological changes)

Ch. 7 - Physical and Developmental Assessment of the Child (see section on general approaches and physical examination, stop before section on general appearance)

Eisenhauer et al. (5th edition, 1999)

Ch. 9 – Cultural Aspects of Drug Therapy

#### III. Environmental Safety

Kozier et al. (6th edition, 2000)

Ch. 31 – Safety

Wong (5th edition, 1997)

Ch. 22 – Pediatric Variations of Nursing Interventions (see sections on Safety: Environmental Factors, Limit Setting, Transporting, and Restraints, only)

#### IV. Biological Safety

Kozier et al. (6th edition, 2000)

Ch. 30 – Asepsis

Ch. 32 – Hygiene

Ch. 34 – Skin Integrity and Wound Care

Eisenhauer et al. (5th edition, 1999)

Ch. 41 – Antimicrobial Drugs That Affect Bacterial

Cell Wall Synthesis

Wong (5th edition, 1997)

Ch. 22 – Pediatric Variations of Nursing Interventions (see section on Safety: Infection Control, only)

Ch. 7 – Physical and Developmental Assessment of the Child (see section on general appearance and skin, only)

#### V. Medication Safety

Kozier et al. (6th edition, 2000)

Ch. 33 - Medications

Eisenhauer et al. (5th edition, 1999) Ch. 7 – Principles of Medication

Wong (5th edition, 1997)

Ch. 22 – Pediatric Variations of Nursing Interventions (see section on Administration of Medications, only)

#### VI. Psychological Safety

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Kozier et al. (6th edition, 2000)

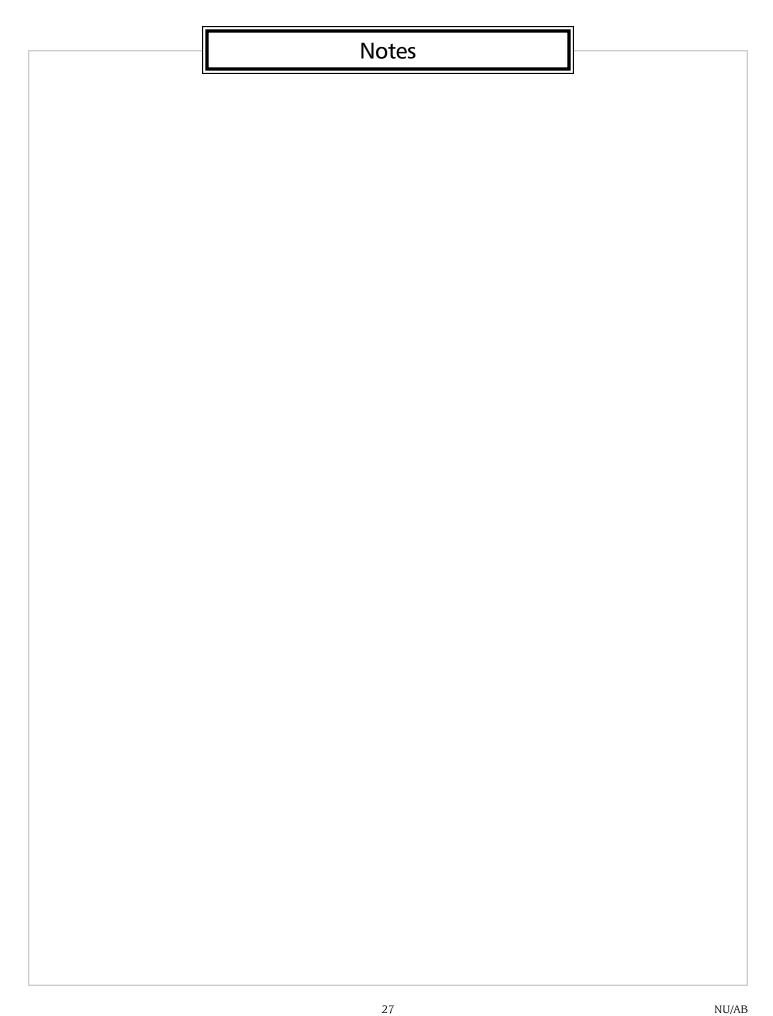
Ch. 25 – Caring, Comforting, and Communicating

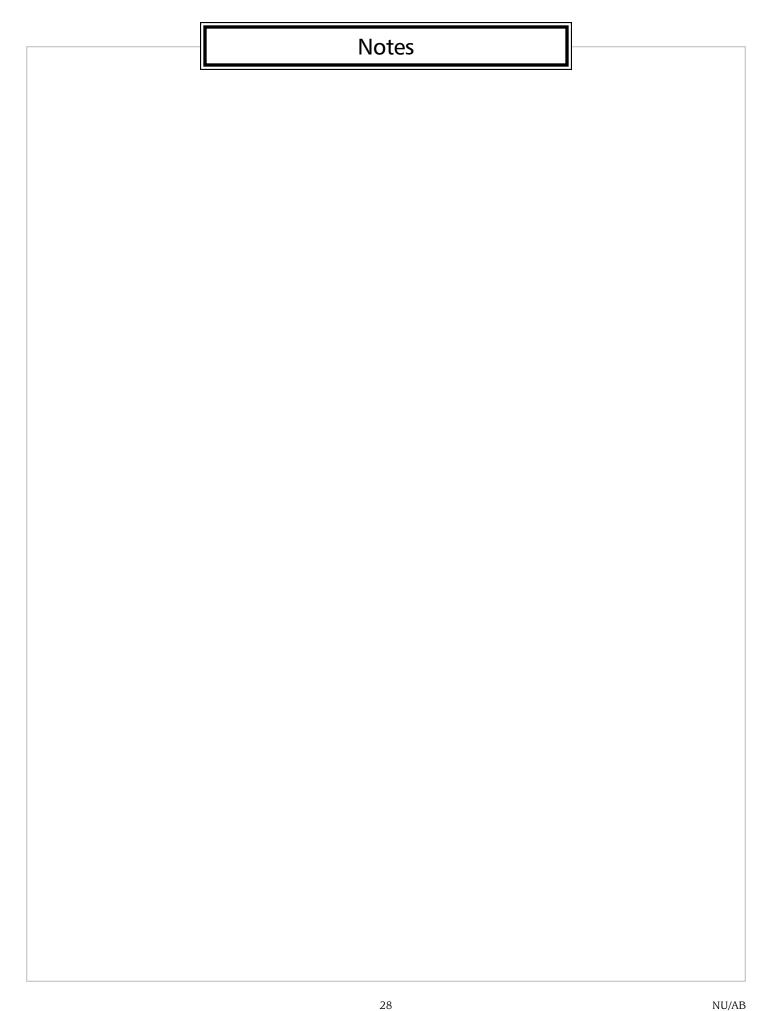
Ch. 26 – Teaching

Wong (5th edition, 1997)

Ch. 6 – Communication and Health Assessment of the Child and Family

(see section on communication, only)





# Regents College Examination Development Committee in Nursing Concepts 1

Leona Bishop, MS, RN (Russell Sage College, Nursing Education, 1971) Professor, Hudson Valley Community College

Joanne Bonesteel, MS, RN (Boston College, Medical-Surgical Nursing, 1984) Nurse Educator, Regents College

Patricia Irons, MA, RN (Columbia University, Nursing Education, 1961)
Professor and Chairperson in Nursing, Queensborough Community College

Marianne Lettus, EdD, RN (SUNY at Albany, Program Development and Evaluation, 1990) Associate Dean of Nursing, Regents College

Mary Ann Hellmer Saul, PhD, RN (Adelphi University, Nursing, 1986) Professor, Nassau Community College

<sup>1</sup>Content Area refers to the location of the question topic in the content outline.

Margaret Warshaw, MA (New York University, Nursing, 1970) Professor of Nursing, County College of Morris

Key To Sample Questions					
Question	Key	Content Area <sup>1</sup>	Question	Key	Content Area <sup>1</sup>
1	3	IA	13	1	IIIB4d
2	4	IA1c	14	4	IVA3c
3	1	IB1b	15	1	IVB1b
4	1	IB2e	16	4	IVB5a
5	3	IB3a	17	4	VA3b
6	3	IIB1	18	1	VB4a
7	2	IIB1b	19	2	VB4e
8	1	IIB5a	20	2	VIA1f
9	1	IIIA4d	21	3	VIB2a
10	1	IIIB3a	22	3	VIB4a
11	4	IIIB1d	23	2	VIB4a
12	4	IIIB4b			

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## **Regents College Written Examinations**

The following is a list of examinations scheduled to be offered during 2000–2001:

#### Arts and Sciences Examinations

Foundations of Gerontology Pathophysiology Psychology of Adulthood & Aging

#### Arts and Sciences Guided Learning Packages

Abnormal Psychology
American Dream
Anatomy & Physiology
English Composition
Ethics: Theory & Practice
History of Nazi Germany
Life Span Developmental
Psychology
Microbiology
Religions of the World
Research Methods in Psychology
Statistics
World Population

#### **Business Examinations**

Business Policy & Strategy
Human Resource Management
Labor Relations
Organizational Behavior
Production/Operations
Management

#### **Education Examination**

Reading Instruction in the Elementary School

#### Nursing Examinations Associate Degree:

Nursing Concepts 3

Differences in Nursing Care: Area A (modified)
Differences in Nursing Care: Area B Differences in Nursing Care: Area C Fundamentals of Nursing Maternal & Child Nursing (associate)
Maternity Nursing
Nursing Concepts 1
Nursing Concepts 2

Occupational Strategies in Nursing

# Nursing Examinations Baccalaureate Degree:

Adult Nursing
Health Restoration: Area I
Health Restoration: Area II
Health Support A: Health
Promotion & Health Protection
Health Support B:

Community Health Nursing Maternal & Child Nursing (baccalaureate)

Professional Strategies in Nursing Psychiatric/Mental Health Nursing

Nursing Guided
Learning Package
Baccalaureate Degree:
Research in Nursing

To receive information concerning testing dates, locations, and fees, contact Regents College:

Test Administration Regents College 7 Columbia Circle Albany, New York 12203-5159 Phone: (518) 464-8500 Toll Free: 1-888-RCEXAMS Internet: testadmn@regents.edu

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